ARC 8999B

ENVIRONMENTAL PROTECTION COMMISSION[567]

Notice of Intended Action

Twenty-five interested persons, a governmental subdivision, an agency or association of 25 or more persons may demand an oral presentation hereon as provided in Iowa Code section 17A.4(1)*"b."*

Notice is also given to the public that the Administrative Rules Review Committee may, on its own motion or on written request by any individual or group, review this proposed action under section 17A.8(6) at a regular or special meeting where the public or interested persons may be heard.

Pursuant to the authority of Iowa Code sections 455B.131, 455B.133, 455B.134, and 455B.152, the Environmental Protection Commission hereby gives Notice of Intended Action to amend Chapter 22, "Controlling Pollution," and Chapter 33, "Special Regulations and Construction Permit Requirements for Major Stationary Sources—Prevention of Significant Deterioration (PSD) of Air Quality," Iowa Administrative Code.

The purpose of this rule making is to ensure that sources of greenhouse gas emissions in Iowa are regulated in the same manner and at the same levels as specified in new federal regulations for greenhouse gases, the Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule).

On April 2, 2007, the U.S. Supreme Court found that greenhouse gases, including carbon dioxide, are air pollutants covered by the Clean Air Act (*Massachusetts v. EPA*, 549 U.S. 497). The Court found that the U.S. Environmental Protection Agency (EPA) was required to determine whether emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

In April 2009, EPA responded to the Court by proposing a finding that greenhouse gases contribute to air pollution that may endanger public health or welfare. On December 7, 2009, EPA issued two distinct findings regarding greenhouse gases, as follows:

1. Endangerment Finding: EPA found that the current and projected atmospheric concentrations of the six key, well-mixed greenhouse gases that include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6) threaten the public health and welfare of current and future generations; and

2. Cause or Contribute Finding: EPA found that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to greenhouse gas pollution, which, in turn, threatens public health and welfare.

These findings, which were published December 15, 2009, did not impose any requirements on industry or other entities. However, these findings were a prerequisite for finalizing the greenhouse gas standards for light-duty vehicles and for setting a schedule to regulate greenhouse gases from stationary sources.

On March 29, 2010, EPA completed its reconsideration of the December 18, 2008, memorandum entitled "EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program," often called "the Johnson memo." The final action confirmed that any new pollutant that EPA may regulate becomes covered under the PSD program on the date when the EPA rule regulating that new pollutant takes effect. This action clarified that, for greenhouse gases, the date of PSD program coverage will be January 2, 2011, the date the light-duty vehicle rule is expected to take effect.

On April 1, 2010, EPA finalized the light-duty vehicle rule controlling greenhouse gas emissions. This rule confirmed that January 2, 2011, is the earliest date that a 2012 model year vehicle meeting these rule requirements may be sold in the United States. On that date, Clean Air Act permitting program requirements will apply to stationary sources of greenhouse gases.

On May 13, 2010, EPA issued the final Tailoring Rule that establishes EPA's approach to addressing greenhouse gas (GHG) emissions from stationary sources under Clean Air Act permitting programs. EPA published the final Tailoring Rule in the Federal Register on June 3, 2010.

The Tailoring Rule for GHG emissions sets thresholds that specify when permits under the PSD and Title V programs are required for new and existing facilities. The Tailoring Rule tailors the requirements of these permitting programs to limit which facilities will be required to obtain PSD and Title V permits. The Tailoring Rule establishes a schedule that will initially focus air permitting programs on the largest sources that are already subject to PSD and Title V requirements. The Tailoring Rule then expands to cover the largest sources of GHG emissions that may not have been previously covered by the PSD or Title V permitting program for other pollutants.

EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to PSD and Title V permitting requirements under the Tailoring Rule, including the nation's largest GHG emitters, such as power plants, refineries, and cement production facilities, as well as other large industrial or commercial emitters. GHG emissions from smaller industrial or commercial facilities will not be covered by the PSD or Title V programs at this time.

The PSD and Title V emissions thresholds for criteria pollutants such as fine particulate, sulfur dioxide and nitrogen dioxide are 100 and 250 tons per year (tpy). EPA has determined that while these thresholds are appropriate for criteria pollutants, they are not feasible for GHGs because GHGs are emitted at much higher levels.

Through the Tailoring Rule, EPA will phase in the GHG permitting requirements in two initial steps outlined below, followed by assessment and rule making to phase in appropriate, additional requirements for controlling GHG emissions from stationary sources.

Step 1 (January 2, 2011, to June 30, 2011): Effective January 2, 2011, only sources currently subject to the PSD permitting program (i.e., sources that are newly constructed or modified in a way that significantly increases emissions of a pollutant other than GHGs) would be subject to permitting requirements for their GHG emissions under the PSD program. For these projects, only GHG increases of 75,000 tpy or more of total GHG (based on potential to emit (PTE) and using a specific formula to calculate "tpy CO_2 equivalent emissions (CO_2e)" as defined in the Tailoring Rule) would be subject to PSD for their GHG emissions.

Similarly, for the Title V program, only sources currently subject to the program (i.e., newly constructed or existing major sources for a pollutant other than GHGs) would be subject to Title V requirements for GHG.

During this time, no sources would be subject to PSD or Title V permitting requirements due solely to GHG emissions.

Step 2 (July 1, 2011, to June 30, 2013): In this phase, PSD permitting requirements will, for the first time, cover new construction projects with a GHG PTE of at least 100,000 tpy CO_2e even if the projects do not exceed the permitting thresholds for any other pollutant. Modifications at existing facilities that increase their GHG PTE by at least 75,000 tpy CO_2e will be subject to permitting requirements, even if the modifications do not significantly increase emissions of any other pollutant.

In Step 2, Title V operating permit requirements will, for the first time, apply to sources based on their GHG emissions even if the requirements would not apply based on emissions of any other pollutant. Facilities with a GHG PTE of 100,000 tpy CO_2e or more will be subject to Title V permitting requirements.

In the Tailoring Rule, EPA commits to undertake another rule making to begin in 2011. The federal rule making will request comments on an additional step for phasing in GHG permitting and may discuss whether certain smaller sources can be permanently excluded from permitting. EPA states that it will not require permitting for smaller sources (those with a GHG PTE below 50,000 tpy) until at least April 30, 2016.

EPA indicates in the Tailoring Rule that EPA will complete a study by the end of April 2015 on remaining GHG permitting burdens that would exist if EPA applied permitting requirements to smaller sources. EPA states that it will complete a rule by April 30, 2016, further addressing permitting for these

facilities. EPA may decide that successful streamlining will allow the phase-in of more sources. EPA may also decide that certain smaller sources need to be permanently excluded from GHG permitting.

This rule making proposes to amend the state's Title V and PSD air quality rules for GHG emission regulation so that the state rules match the federal Tailoring Rule (see references to the corresponding federal amendments in the item statements below).

Items 1 and 2 amend the definitions applicable to the Title V Operating Permit (Title V) program. In combination, these two amendments codify the limited conditions under which greenhouse gases are subject to Title V regulation.

Title V requires that an affected facility obtain a Title V operating permit. The Title V operating permit, which is renewed every five years, contains all air emission control requirements that apply to the facility, including the requirements established through construction permitting.

Item 1 amends the definition of "major source" in rule 567—22.100(455B) to add the Title V term "subject to regulation." This proposed change is identical to the amended definition in the final federal Tailoring Rule [see 40 Code of Federal Regulations (CFR) 70.2, definition of "major source," as amended on June 3, 2010].

Item 2 amends rule 567—22.100(455B) to add the definition of "subject to regulation." The proposed definition includes definitions for "greenhouse gases (GHGs)" and "tpy CO_2 equivalent emissions (CO_2e)" and further specifies the Title V applicability criteria for stationary sources of GHG emissions. The proposed definition matches the new federal definition in the Tailoring Rule [see 40 CFR 70.2, definition of "subject to regulation," as amended on June 3, 2010].

Beginning January 2, 2011, power plants, industrial facilities, ethanol plants, state universities, municipal utilities, and other facilities in Iowa that are already considered major sources under the Title V program will be affected under the proposed amendments.

The approximately 280 facilities that are currently subject to the Title V program have already been required to report GHG emissions under Iowa statutes and administrative rules. As these facilities apply for, renew or modify their Title V permits, they must address GHG requirements, such as calculating and reporting GHG emissions using the CO_2e methodology, and any other applicable requirements.

Beginning on July 1, 2011, additional sources of GHG emissions, such as ethanol plants, municipal utilities, some hospitals, and some larger landfills, will be classified as major sources under Title V.

The Department estimates that 65 additional facilities will become subject to Title V on July 1, 2011. These facilities will need to apply for a Title V permit by July 1, 2012. However, it is expected that one third or more of these 65 newly affected facilities (over 20 facilities) may already have, or may be able to take, enforceable limits in construction permits, such as limits on hours of operation or limits on production throughput, that would potentially reduce GHG emissions below the applicable Title V thresholds.

Items 3 and 4 amend the definitions applicable to the PSD program. In combination, these two amendments codify the limited conditions under which greenhouse gases are subject to PSD program regulation.

New source review (NSR) is a federal term for review and preconstruction permitting of new or modified stationary sources of air pollution. The PSD program is a component of NSR that includes procedures to ensure that air quality standards are maintained. In general, the PSD program requires that an affected facility obtain a PSD permit specifying how the facility will control emissions. The permit requires the facility to apply Best Available Control Technology (BACT), which is determined on a case-by-case basis taking into account, among other factors, the cost and effectiveness of the control.

Item 3 amends subrule 33.3(1) to revise the definition of "regulated NSR pollutant" to clarify that the term "subject to regulation" is now specifically defined for the PSD program. Additionally, language is moved from paragraph "4" to new paragraph "5." This proposed change matches the amended definition in the final federal Tailoring Rule [see 40 CFR 52.21(b)(50)(iv) and 52.21(b)(50)(v), as amended on June 3, 2010].

Item 4 amends subrule 33.3(1) to add the definition of "subject to regulation" for the PSD program. The proposed definition matches the final federal definition in the Tailoring Rule [see 40 CFR 52.21(b)(49), as amended on June 3, 2010]. The proposed definition includes definitions

for "greenhouse gases (GHGs)" and "tpy CO_2 equivalent emissions (CO_2e)" and also specifies the methodology for calculating an emissions increase for GHGs, the applicable thresholds for GHG emissions, and the schedule indicating when the applicability thresholds take effect.

Starting January 2, 2011, facilities already subject to PSD and that also meet the threshold levels for GHG emissions will be impacted. A facility will be subject to PSD permitting requirements if it is a new major stationary source for a regulated NSR pollutant that is not a GHG and also will emit or has the potential to emit 75,000 tpy CO_2e; or, if the facility is an existing major stationary source for a regulated NSR pollutant that is not a GHG, will have an emissions increase of a regulated NSR pollutant, and will have an emissions increase of 75,000 tpy CO_2e.

In any given year, the Department receives approximately 5 to 20 PSD project applications. The specific nature of the project will determine if it is subject to PSD requirements for GHGs. The Department expects very few projects to be affected by the new threshold levels for GHG emissions during this first phase.

Beginning July 1, 2011, a facility will be subject to PSD permitting requirements if it is a new stationary source that will emit or has the potential to emit 100,000 tpy CO_2e; or if the facility is an existing stationary source that emits or has the potential to emit 100,000 tpy CO_2e and when such stationary source undertakes a physical change or a change in the method of operation that will result in an emissions increase of 75,000 tpy CO_2e or more.

As noted above, the Department receives approximately 5 to 20 PSD project applications each year. The specific nature of the project will determine if it is subject to PSD requirements for GHGs. Additionally, the Department expects that many new or existing facilities may already have, or may be able to take, enforceable limits in construction permits, such as limits on hours of operation or limits on production throughput, that would potentially reduce GHG emissions below the applicable PSD thresholds.

This proposed rule making does not make any changes to the rules for Title V fees. At this time, owners or operators of Title V facilities are not required to include GHG emissions in calculating their Title V fee payments.

Without this proposed rule making to amend state air quality rules, GHG emission sources would be subject to the current Title V and PSD applicability thresholds of 100 tpy and 250 tpy, which the Department estimates would subject 61,000 facilities in Iowa to Title V permitting and 410 facilities to PSD permitting.

As with other federal air quality regulations, EPA may exercise its federal authority over states that do not implement federal air quality regulations. EPA indicates that it plans to take immediate action in states that fail to apply the GHG thresholds in the Tailoring Rule to the states' Title V and PSD programs by January 2, 2011. To avoid these consequences, the Department is proceeding with this proposed rule making so that the adopted rules will be in effect prior to January 2, 2011, and Iowa may continue to manage the PSD and Title V programs under state authority.

Any person may make written suggestions or comments on the proposed amendments on or before September 14, 2010. Written comments should be directed to Christine Paulson, Department of Natural Resources, Air Quality Bureau, 7900 Hickman Road, Suite 1, Windsor Heights, Iowa 50324; fax (515)242-5094; or by electronic mail to christine.paulson@dnr.iowa.gov.

A public hearing will be held on Monday, September 13, 2010, at 1 p.m. in the conference rooms at the Department's Air Quality Bureau office located at 7900 Hickman Road, Windsor Heights, Iowa. At the public hearing, comments on the proposed amendments may be submitted orally or in writing. All comments must be received no later than Tuesday, September 14, 2010.

Any person who intends to attend the public hearing and has special requirements, such as those related to hearing or mobility impairments, should contact Christine Paulson at (515)242-5154 to advise of any specific needs.

These amendments are intended to implement Iowa Code section 455B.133.

The following amendments are proposed.

ITEM 1. Amend rule **567—22.100(455B)**, definition of "Major source," as follows:

"Major source" means any stationary source (or any group of stationary sources located on one or more contiguous or adjacent properties and under common control of the same person or of persons under common control) belonging to a single major industrial grouping that is any of the following:

1. A major stationary source of air pollutants, as defined in Section 302 of the Act, that directly emits or has the potential to emit 100 tons per year (tpy) or more of any air pollutant subject to regulation (including any major source of fugitive emissions of any such pollutant). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the Act, unless the source belongs to one of the stationary source categories listed in this chapter.

2. and 3. No change.

ITEM 2. Adopt the following **new** definition of "Subject to regulation" in rule **567—22.100(455B)**:

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally applicable regulation codified by the Administrator in 40 CFR Subchapter C (Air Programs) that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity, except that:

1. Greenhouse gases (GHGs), the air pollutant defined in 40 CFR §86.1818-12(a) (as amended on May 7, 2010) as the aggregate group of six greenhouse gases that includes carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation unless, as of July 1, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tpy CO_2 equivalent emissions.

2. The term "tpy CO_2 equivalent emissions (CO_2e)" shall represent an amount of GHGs emitted and shall be computed by multiplying the mass amount of emissions (tpy) for each of the six greenhouse gases in the pollutant GHGs by the associated global warming potential of the gas published at 40 CFR Part 98, Subpart A, Table A-1, "Global Warming Potentials," (as amended on October 30, 2009) and summing the resultant value for each to compute a tpy CO_2e.

ITEM 3. Amend subrule **33.3(1)**, definition of "Regulated NSR pollutant," as follows:

"Regulated NSR pollutant" means the following:

1. Any pollutant for which a national ambient air quality standard has been promulgated and any constituents or precursors for such pollutants identified by the Administrator (e.g., volatile organic compounds and NO_X are precursors for ozone);

2. Any pollutant that is subject to any standard promulgated under Section 111 of the Act;

3. Any Class I or Class II substance subject to a standard promulgated under or established by Title VI of the Act; or

4. Any pollutant that otherwise is subject to regulation under the Act~~; except that any or all hazardous air pollutants either listed in Section 112 of the Act or added to the list pursuant to Section 112(b)(2) of the Act, which have not been delisted pursuant to Section 112(b)(3) of the Act, are not regulated NSR pollutants unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act.~~ as defined in 33.3(1), definition of "subject to regulation."

5. Notwithstanding paragraphs "1" through "4," the definition of "regulated NSR pollutant" shall not include any or all hazardous air pollutants that are either listed in Section 112 of the Act or added to the list pursuant to Section 112(b)(2) of the Act and that have not been delisted pursuant to Section 112(b)(3) of the Act, unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a general pollutant listed under Section 108 of the Act.

ITEM 4. Adopt the following **new** definition of "Subject to regulation" in subrule **33.3(1)**:

"Subject to regulation" means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally applicable regulation codified by the Administrator in 40 CFR Subchapter C (Air Programs) that requires actual control of the quantity of emissions of that pollutant,

and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity, except that:

1. Greenhouse gases (GHGs), the air pollutant defined in 40 CFR §86.1818-12(a) (as amended on May 7, 2010) as the aggregate group of six greenhouse gases that includes carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation except as provided in paragraphs "4" and "5."

2. For purposes of paragraphs "3," "4," and "5," the term "tpy CO_2 equivalent emissions (CO_2e)" shall represent an amount of GHGs emitted and shall be computed as follows:

(a) Multiply the mass amount of emissions (tpy) for each of the six greenhouse gases in the pollutant GHGs by the associated global warming potential of the gas published at 40 CFR Part 98, Subpart A, Table A-1, "Global Warming Potentials," (as amended on October 30, 2009), and

(b) Sum the resultant value from paragraph (a) for each gas to compute a tpy CO_2e.

3. The term "emissions increase," as used in this paragraph and in paragraphs "4" and "5," shall mean that both a significant emissions increase (as calculated using the procedures specified in 33.3(2)"c" through 33.3(2)"h") and a significant net emissions increase (as specified in 33.3(1), in the definitions of "net emissions increase" and "significant") occur. For the pollutant GHGs, an emissions increase shall be based on tpy CO_2e and shall be calculated assuming the pollutant GHGs are a regulated NSR pollutant, and "significant" is defined as 75,000 tpy CO_2e rather than calculated by applying the value specified in 33.3(1), in paragraph "2" of the definition of "significant."

4. Beginning January 2, 2011, the pollutant GHGs are subject to regulation if:

(a) The stationary source is a new major stationary source for a regulated NSR pollutant that is not a GHG, and also will emit or will have the potential to emit 75,000 tpy CO_2e or more, or

(b) The stationary source is an existing major stationary source for a regulated NSR pollutant that is not a GHG, and also will have an emissions increase of a regulated NSR pollutant and an emissions increase of 75,000 tpy CO_2e or more; and

5. Beginning July 1, 2011, in addition to the provisions in paragraph "4," the pollutant GHGs shall also be subject to regulation:

(a) At a new stationary source that will emit or have the potential to emit 100,000 tpy CO_2e, or

(b) At an existing stationary source that emits or has the potential to emit 100,000 tpy $CO_2$2e, when such stationary source undertakes a physical change or change in the method of operation that will result in an emissions increase of 75,000 tpy CO_2e or more.